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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,675	02/20/2004	Ok-Kyung Cho	1021.43510X00	5533

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EXAMINER

MALLARI, PATRICIA C

ART UNIT

PAPER NUMBER

3736

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/781,675	<b>Applicant(s)</b> CHO ET AL.	
	<b>Examiner</b> Patricia C. Mallari	<b>Art Unit</b> 3736	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-9 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 10 is/are rejected.
- 7) ☒ Claim(s) 4,5 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/02, 5/04, 12/04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

***Claim Objections***

Claims 3, 4, 5 and 10 are objected to because of the following informalities:

on line 3 of claim 3, "person and diabetic" should be replaced with "person or diabetic";

on line 4 of claim 4, "a blood sugar level" should be replaced with "the blood sugar level";

on line 8 of claim 5, "a blood sugar level" should be replaced with "the blood sugar level";

on line 4 of claim 10, "the type" should be replaced with "a type". Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,899,855 to Brown in view of US Patent No. 5,924,996 to Cho et al. Brown discloses a selecting means 62 by which one may select a patient (col. 13, lines 8-27 of Brown), wherein the patient may be an able-bodied person or diabetic patient, and a glucose meter 16 of the type capable of sensing blood glucose level and producing an electrical signal representative thereof (figs. 1 & 2; col. 8, lines 23-27 of Brown). Brown fails to describe calculating a blood sugar level using an obtained

plurality of measurement values relating to a body surface and a measurement environment.

However, Cho discloses a method of measuring glucose wherein a plurality of measurement values relating to a body surface (body temperature) and a measurement environment (reference and room temperature) are obtained using a measuring portion for doing so (col. 7, lines 41-58; col. 9, lines 24-29; col. 9, lines 38-45; col. 10, lines 5-14 of Cho), and a blood sugar level (glucose) is calculated using the obtained plurality of measurement values and a regression function for either able-bodied persons or diabetic patients using a microcomputer (col. 6, lines 13-20; col. 7, lines 14-27; col. 7, line 59-col. 8, line 3; col. 9, lines 33-35; col. 10, lines 5-14; col. 10, lines 18-24 of Cho). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the glucose meter of Cho as that of Brown, since Brown teaches using a glucose meter capable of sensing blood glucose level and producing an electrical signal representative thereof and Cho describes such a glucose meter. Additionally the use of the glucose meter of Cho in the method and apparatus of Brown would further obviate the removal of capillary blood from a patient (col. 4, lines 30-35 of Cho), thereby increasing a user's comfort.

Regarding the language on lines 4-5 of claim 1, it is noted that the specification describes a means by which a user indicates that he or she is diabetic or is normal with respect to diabetes. However, the current claim language does not reflect this, and recites only that the means is a selecting means basically enables selection of a patient, wherein the means has further structure recited in claim 3.

Regarding claim 2, the selecting means 62 comprises a display portion capable of prompting the selection of either an able-bodied person or a diabetic patient (col. 13, lines 12-26 of Brown). As to the language “for prompting the selection . . .” on lines 2-3 of claim 2, the applicants should note that this is merely “intended use” language which cannot be relied upon to define over the prior art of Brown, as modified by Cho, since the combined references teach all of the claimed elements and their recited relationships. See *Ex parte Masham 2 USPQ 2<sup>nd</sup> 1647*. The display of Brown, as modified by Cho, is certainly capable of performing such prompting.

Regarding claim 3, the selecting means 62 comprises an input operating portion provided for the able-bodied person or diabetic patient individually (col. 13, lines 12-27 of Brown).

***Allowable Subject Matter***

Claims 4, 5, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 6-9 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

With regard to claims 4 and 5, the prior art of record fails to teach or fairly suggest a blood sugar level measuring apparatus comprising a storage portion in which a plurality of regression functions are stored, wherein the calculation portion reads a regression function corresponding to the result of selection from the storage portion to

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calculate a blood sugar level, in combination with all of the other limitations of the claim.

With further regard to claim 5, the prior art of record further fails to teach such storage portion storing a mean value and a standard deviation of a plurality of parameters corresponding to individual regression functions and the calculation portion reading the mean value and standard deviation from the storage portion before calculating a blood sugar level, in combination with all of the other limitations of the claim.

With regard to claims 6-9, the prior art of record fails to teach or fairly suggest a blood sugar level measure apparatus comprising storage portion in which a function for able-bodied persons and a function for diabetic patients are individually stored, the functions relating parameters corresponding to the plurality of temperatures and the blood oxygen amount to blood sugar levels, and a calculation portion for converting the plurality of measurement values from the heat amount measuring portion and the oxygen amount measuring portion into the parameters individually, and applying the parameters to the function stored in the storage portion for the able-bodied persons or for the diabetic patients, depending on the identifying input entered via the input means, in order to calculate a blood sugar level, in combination with all of the other limitations of the claim.

With regard to claim 11, the prior art of record fails to teach or fairly suggest a blood sugar level measuring method wherein the obtained plurality of parameters are normalized with a mean value and standard deviation corresponding to the type obtained and calculating a blood sugar level by applying the normalized plurality of

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parameters to the regression function corresponding to the able-bodied person or the diabetic patient, in combination with all of the other limitations of the claim.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 4,509,531 to Ward

US Patent No. 5,857,966 to Clawson

US Patent Application Publication No. 204/0225209 to Cho et al.

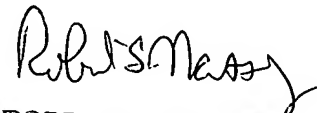
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia C. Mallari whose telephone number is (571) 272-4729. The examiner can normally be reached on Monday-Friday 10:00 am-6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Patricia Mallari  
Patent Examiner  
Art Unit 3736

  
ROBERT M. MASSEY  
PATENT EXAMINER